

AVALONIA LAND CONSERVANCY, Inc. P.O. Box 49, Old Mystic, CT 06372

Perry Natural Area

Property Management Plan

North Anguilla Road Pawcatuck, New London County, Connecticut

Stonington Town Committee is responsible for the stewardship of this property

Plan Prepared by: Richard Newton & Beth Sullivan Fall 2015

Approved by Stonington Town Committee:	
Date	-
Approved by Stewardship Committee:	
Date	



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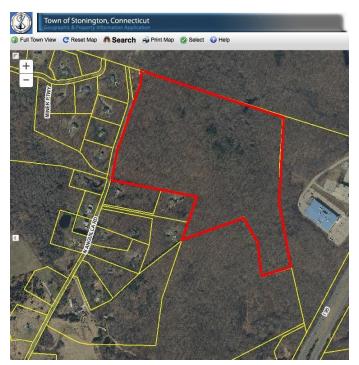
SUMMARY

This plan is for a property on North Anguilla Road in Pawcatuck, CT. This is a trailed property of mostly upland deciduous woods with evergreen grove. See the photos and map that follows. Visitors are welcome.

Property is owned by Avalonia Land Conservancy, Inc., P.O. Box 49, Old Mystic, CT 06372. Avalonia Land Conservancy (ALC) can be reached by email at avalonialc@yahoo.com, by phone at 860-884-3500, and has a website at http://www.avalonialandconservancy.org.

HISTORY

The Perry Natural Area is located in the Town of Stonington northeast area of town on the east side of North Anguilla Road. Northern boundary is Stonington-North Stonington town line. There area several interconnected loop trails totaling approximately 1.8 miles. The property consists of former farmland and a homestead with old walls, stone cairns, foundations and an old cemetery.



SITE INFORMATION

The property

A parcel map of the property from the Town of Stonington GIS database is shown to the left. The property is identified as Map/Book/Lot/Unit 4-2-2. Total GIS acreage is 60 acres.

Acquisition history

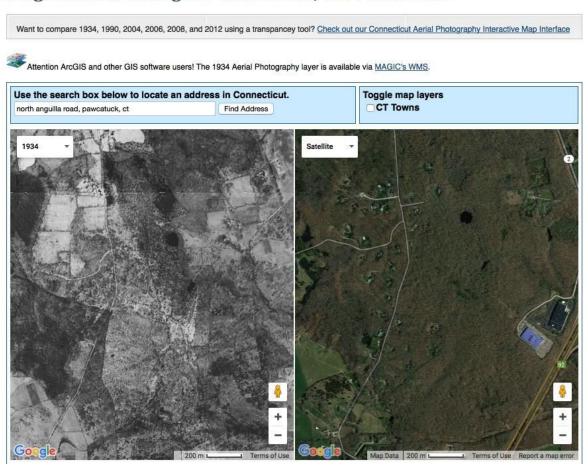
This property was quitclaimed from the Pequot-Sepos Nature Center to the Mashantucket Land Trust in 1982. Prior to that Harvey Perry donated the property to Pequot-Sepos Nature Center in 1961. Mashantucket Land Trust was

renamed Avalonia Land Conservancy, Inc. in September 1995.

Land use history

Historical photos show the property is fairly unchanged with most other adjoining farmland having been developed into residential housing (large lot sizes) or allowed to revert to forest. Industrial property abuts to the southeast the northern border is the town line. A natural gas line bisects the property.

Neighborhood Change in Connecticut, 1934 to Present



Public use resources

The property's deed restricts any active management of the property except for trail maintenance. Non-chemical limited control of invasive plants is allowed. It is to remain in its natural state, letting nature take its course. In the 1980's a gypsy moth infestation killed a large number of mainly oak trees, allowing sunlight to reach the undergrowth, resulting in thicker understory.

Public benefit of the protected property:

The property is not within a CT DEEP Natural Diversity Database Area, but it has not been extensively researched. An extensive trail system exists and is mapped.

The property is a significant natural area that qualifies as being preserved for a "conservation purpose" under 26 US Code 170(h)(4):

- (4) Conservation purpose defined
- (A) In general
- For purposes of this subsection, the term "conservation purpose" means—
- (i) the preservation of land areas for outdoor recreation by, or the education of, the general public,
- (ii) the protection of a relatively natural habitat of fish, wildlife, or plants, or similar ecosystem,
- (iii) the preservation of open space (including farmland and forest land) where such preservation is— $\,$
- (I) for the scenic enjoyment of the general public, or
- (II) pursuant to a clearly delineated Federal, State, or local governmental conservation policy,
- and will yield a significant public benefit, or
- (iv) the preservation of an historically important land area or a certified historic structure.

Natural resources

The parcel is open to the public, as are all Avalonia properties. The majority of the Perry Natural Area is upland woods. With the exception of the evergreen grove it is predominantly deciduous, mixed Oak, Hickory and Maple. The Pine grove provides a nice area of diversity but has suffered through several hurricanes and winter storms. Broken trees were allowed to stand as snags and downed trunks remain on ground to provide hard material for cover and decomposition.

There is abundant hard mast: acorns, nuts and seeds. However there is not a significant amount of mid story and understory in most areas, likely due to shading and overgrazing by deer. Several areas have low bush blueberry and huckleberry which is attractive to many species.

Some of the eastern uplands have remains of old cedars that are gradually being shaded out, indicating former open land succession to forest.

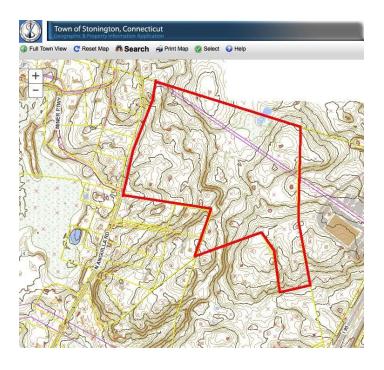
The only significant wetland area is north and east of the powerline and is well away from the trailed areas. Vernal pools and damp red Maple swamps support amphibians and typical wetland vegetation. The powerline itself is often flooded with pools that are attractive to wildlife. The Powerline itself is maintained with very low growth so the edges provide a good diversity of habitat.

The main preserve is relatively free of masses of invasives with the exception of the area that was the former home-site near foundations and wells. There, invasives often close the gray trail and area needs more frequent clearing.

The area is part of larger block of mature forest, providing nesting opportunities for forest birds such as Scarlet Tanager, Wood Pewee, Oven-bird, Vireos, Grosbeaks and great Crested flycatchers, among others, which have been observed. Typical woodland residents are common: Chickadees, Titmice, Nuthatches, several woodpecker species. A Barred Owl has been a noted resident

Potential threats to conservation values: Over growth of invasive plants could degrade the habitat. ATV incursions are known to exist from powerline and eastern edge.

ELEVATIONS / WETLANDS



SPECIAL FEATURES AND CULTURAL RESOURCES

The eastern portion, gray trail, seems to have the greatest number of historic sites. There is an old foundation and large flat rocks that could have been hearth or entry steps. There are several old dug wells, somewhat off the trail which need to be monitored and kept covered. There are a number of stone piles, cairns, of uncertain origins and purposes. There is also a small cemetery with the name of the Brown family on main stones as well as many smaller unmarked ones. Vandals have toppled stones in the past and volunteers have set them up and supported them. It does not appear there is any maintenance done to the cemetery plot.

MANAGEMENT OBJECTIVES

Stewardship policies

Avalonia Land Conservancy Fee Land Stewardship Principles were approved on December 16, 2009 and the document is available at the Conservancy's office on Hatch Street in Mystic, CT. This document sets forth the general principles governing stewardship of all Avalonia properties. The document or any approved successor is hereby incorporated as part of this management plan.

Protection

Condition of Boundaries:

- □ Corner monuments/pins found
- ⊠ Boundary signs posted

Boundaries are posted (some old Mashantucket signs still need to be swapped out) and a trailhead sign is installed. Trail map signs installed at entrance and throughout the property.

An annual walk around the boundaries of the properties is required. Yearly surveillance should be conducted to check for infringement or encroachment by neighbors using ATVs. All motorized vehicles are prohibited on the properties except for maintenance and "no motorized vehicles" signs have been posted.

Maintaining property's appearance

Litter control. Trail clearing work in areas of invasives, needed more frequently than elsewhere.

Public use

The preserve is open to the public for passive recreational use. Motor vehicles, bicycle riding, and horseback riding are not permitted. Hunting and the use of firearms on the property including bow hunting and target practice are not permitted. Camping is not allowed. Dogs must be kept on a leash no longer than 7 feet long. Visitors are not allowed to pick vegetation or disturb wildlife excessively.

Enhancing wildlife habitat(s)

None allowed per deed. Property is to be left in natural state. Downed trees and snags provide habitat. Trees, limbs and brush removed from trails after storm events are moved aside as brush

pile areas.

Controlling invasive species

Only limited non-chemical control of invasive species on this property is allowed.

Erosion control and flooding

No significant issues. The trail along the gas line can become flooded after significant rainfall.

Productive uses

Provides habitat for local wildlife. Valuable as part of greater contiguous area of forested land in an increasingly developed landscape.

<u>Scientific and educational activities:</u> Raul Ferreira, entomologist with academic connections to Yale-Peabody Museum and UConn, conducted extensive insect inventory in 2014 (see appendix).

<u>Response to large natural disasters:</u> None. Property is to be left in natural state. Only removal of hazardous obstacles allowed.

Special management considerations: None.

IMPLEMENTING THE PLAN

Recurring and occasional requirements

Stonington Town Committee members visit the site on a limited basis. Trail maintenance and removal of blow downs.

Annual obligations

A boundary walk around the outside perimeter the property is required.

Short term plan (1 - 5 years)

Annual boundary walk.

Long term plan (5+ years)

Significant undeveloped land to the south should be reviewed for possible future preservation.

Schedule for revising this plan

This plan shall be reviewed at least every five years and updated as necessary.

APPENDICES

I. Zoning map for property and surrounding area is available at the Stonington Town Hall or online at http://gis.stonington-ct.gov.

Deeds are available in Avalonia files, Stonington Town Hall and online at https://connecticut-townclerks-records.com/User/Login.aspx?ReturnUrl=%2fIndex.aspx

II. Raul Ferreira 2014 report:

INSECT MONITORING IN THE AVALONIA PRESERVES

INTRODUCTION

The purpose of this report is to increase the awareness of the importance of insects in the Avalonia Preserves and to provide guidelines for developing inventories and monitoring of the invertebrate fauna as a basis for the promotion of conservation and public knowledge of these organisms.

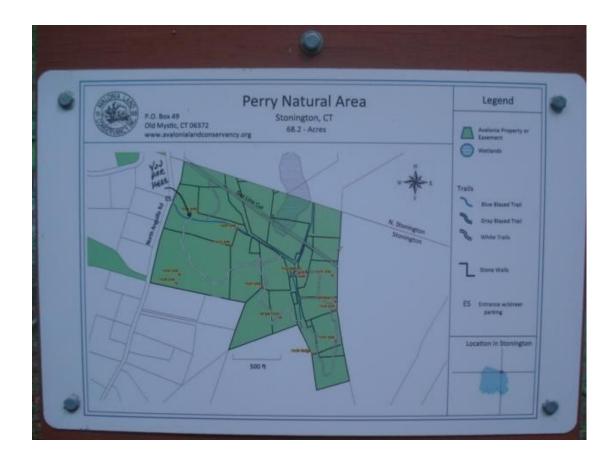
In any effort to survey and illustrate the invertebrate fauna of the Preserves, considerable attention should be given to conservation and biodiversity. Central to these surveys are the insects. They constitute the vast majority of the animals within the Preserves and they show the most biological diversity. Also, because insects are major contenders in ecosystem processes, it makes them of unique value for scientific studies. Investigations have shown that insects are useful indicators of changes in the environment. Their role as natural habitat monitors can give early warnings of habitat changes that could have important social and economic consequences. Specifically, insects have revealed changes in water quality, conditions of wetlands, increases in air pollution levels, and contamination of soils. Accurate information of insect populations, in a given natural habitat, can be useful in determining whether endangered species are at risk.

Based upon the above information, I recommend the following:

1- An invertebrate fauna survey should be made in each Preserve. The purpose of

- these surveys would be to determine the species (taxa) present and to show the amount of variation within each species. This type of information would assure that future monitoring would be easy and rapid.
- 2- These surveys would be the beginning of a complete inventory and would take into account previous studies from existing literature and from vouchers specimens of known scientific collections made in the Preserves and/or surrounding regions.
- 3- The Preserves Directors should encourage experts to assist in these surveys by publicizing the need to make a complete inventory of these important natural habitats. Those working on the inventory should supply voucher specimens that will be deposited into central collections (UCONN, PEABODY MUSEUM) to serve as reference specimens for future studies.
- 4- An educational program should be created to educate the general public about the importance of these animals in natural habitats and to help Preserves staff members become aware of the processes that the invertebrates play in the integrity of the natural ecosystem.

PERRY PRESERVE

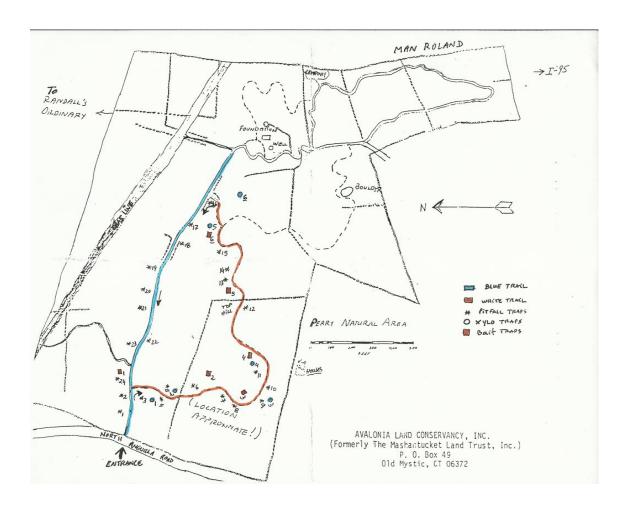


LIST OF SPECIMENS COLLECTED

The following represents a preliminary list of insect specimens, presently known from the Perry Preserve. The list is arranged according to the system used in biological classification. The most inclusive group in this list is the ORDER. Each Order is then divided into successively smaller sub-categories beginning with the FAMILY and followed be Sub-FAMILY, GENUS and SPECIES.

The species is the most specific name and categorizes a unique kind of insect. This list is not complete. Future reports with future collected specimens will be identified and added to the list.

AREA SURVEYED



LIST OF SPECIMENS

ORDER ORTHOPTERA

SUBORDER BLATTODEA

Family BLATTIDAE

Parcoblatta virginica (Brunner von Wattenwyl)

Blatta orientalis Linnaeus

ORDER DERMAPTERA

Family FORFICULIDAE

Forficula auricularia Linnaeus

ORDER COLEOPTERA

Sub-ORDER ADEPHAGA

Family CARABIDAE

Scarites subterraneus Fabricius

Agonum melanarium Dejean

Amara aenea (DeGeer)

Cymindis limbata Dejean

Notiophilus aeneus (Herbst)

Platynus decentis (Say)

Poecilus lucublandus (Say)

Pterostichus mutus (Say)

Pterostichus stygicus (Say)

Pterostichus tristis (Dejean)

Sphaeroderus stenostomus lecontei Dejean

Synuchus impunctatus (Say)

Trichotichnus autumnalis (Say)

Galerita bicolor (Drury)

Cicindela sexguttata Fabricius

Family SILPHIDAE

Necrophila Americana (Linnaeus)

Oiceoptoma inequale (Fabricius)

Oiceoptoma noveboracense (Forster)

Nicrophorus sayi Laporte

Nicrophorus tomentosus Weber

Nicrophorus orbicollis Say

Family STAPHYLINIDAE

Platydracus maculosus (Gravenhorst)

Platydracus cupripennis (Melsheimer)

Platydracus praetermissus Newton

Platydracus zonatus (Gravenhorst)

Phylonthus caeruleipennis (Mannerheim)

Sepedophilus cinctulus (Erichson)

Sunius confluentus (Say)

Homaeotarsus pallipes (Gravenhorst)

Oxyporus quinquemaculatus LeConte

Family CERAMBYCIDAE

Tilloclytus geminatus (Haldeman)

Graphisurus fasciatus (DeGeer)

Strangalepta abbreviata (Germar)

Urographis despectus (LeConte)

Phymatodes aereus (Newmann)

Phymatodes testaceus (Linnaeus)

Strangalia luteicornis (Fabricius)

Family SCARABAEIDAE

Strigoderma pygmaea (Fabricius)

Trox scaber (Linnaeus)

Odonteus liebecki (Wallis)

Serica atracapilla (Kirby)

Dichelonyx linearis (Gyllenhal)

Popillia japonica Newman

Exomala orientalis (Waterhouse)

Geotrupes hornii Blanchard

Ataenius spretulus (Haldeman)

Onthophagus striatulus (Beauville)

Family LAMPYRIDAE

Ellychnia corrusca (Linnaeus)

Lucidota atra (Fabricius)

Photinus consimilis Green

Family LYCIDAE

Dictyoptera aurora (Herbst)

Calopteron reticulatum (Fabricius)

Family CANTHARIDAE

Rhagonycha recta (Melsheimer)

Podabrus rugosulus LeConte

Family NITIDULIDAE

Stelidota octomaculata (Say)

Pallodes pallidus (Palisot de Beauvois)

Glischrochilus fasciatus (Olivier)

Glischrochilus sanguinolentus (Olivier)

Epuraea flavomaculata Maklin

Amphicrossus ciliatus (Olivier)

Family ENDOMYCHIDAE

Aphorista vittata (Fabricius)

Family CLERIDAE

Cymatodera bicolor (Say)

Family HISTERIDAE

Hololepta aequalis

Euspilatus assimilis (Paykull)

Family LEIODIDAE

Catops americanus Hatch

Family TENEBRIONIDAE

Haplandrus fulvipes (Herbst)

Isomira sericea (Say)

Family EROTYLIDAE

Trotoma biguttata (Say)

Family ELATERIDAE

Ampedus linteus (Say

ORDER HYMENOPTERA

Family PELECINIDAE

Pelecinus polyturator (Drury)

Family APIDAE

Apis mellifera Linnaeus

Xylocopa virginica (Linnaeus)

Nomada maculate Cresson

Family VESPIDAE

Polistes fuscatus (Fabricius)

Polistes annularis (Linnaeus)

Family ARGIDAE

Arge coccinea (Fabricius)

ORDER STREPSIPTERA

Family STYLOPIDAE

Xenos sp.

Parasit of *Polistes fuscatus* (Fabricius)

ORDER DIPTERA

Family TABANIDAE

Tabanus catenatus Walker

Family ASILIDAE

Efferia aestuans (Linnaeus)

Laphria sericea Say

Laphria canis Williston

ACKNOWLEDGEMENTS

I want to thank Beth Sullivan for allowing me to collect on Perry Preserve, to Amanda Lindberg for making the contact with Avalonia, Muireann O'Callaghan and her daughter Fiona Frohnapfel, her son Ethan Frohnapfel, and her niece Teresa Lynders for helping in the survey, as well my wife Rosa for the company and survey.

Pawcatuck, November 4, 2014

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